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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/763,223

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Byoung-Woo Cho

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EXAMINER

TOMPKINS, ALISSA JILL

ART UNIT

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3765

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/763,223	Applicant(s) CHO, BYOUNG-WOO	
	Examiner ALISSA J. TOMPKINS	Art Unit 3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/28/2010 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 and 5-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the applicant claims that the head receiving part is made of a multiple fabric. What exactly is a multiple fabric? Does a multiple fabric have at least two layers? Is it a knit fabric? The applicant's specification does not give a clear definition

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of what a multiple fabric is. The claims have been rejected as best understood by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-8, and 21 to the extent understood by the Examiner are rejected under 35 U.S.C. 103(a) as being unpatentable over Cho (U.S. 5,715,540) in view of Adamson (U.S. 2,327,756).

As for claim 1, Cho discloses a headwear 10 comprising a head receiving part 11 made of a stretchable or non-stretchable fabric (Column 5, 62-66 through Column 6, 1). The head receiving part is made of a multiple fabric (Column 4, 18-22). Cho states that the sweatband portion of the headwear is manufactured by having combined fabrics woven with stretchable yarn. Therefore the headwear is made of multiple fabrics, and as best understood by the Examiner is made of a multiple fabric. A sweatband 25 is peripherally attached to an inner side of the head receiving part along a lower edge thereof (Figure 4). The sweatband is made of an elastic weft knitted fabric (Column 7, 13-14). It is well known in the art that a fabric having elastic wefts would result in a configuration where the warp yarns are alternately arranged to be adjacent to each

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other in vertically separated layers in an unstretched state. In the case of the present invention, Cho shows in Figure 10 an unstretched state of the head receiving part in which the headgear is not deformed by the user's head. In this configuration, first warps would overlap second warps in the unstretched state so that centers of the first warps are above spaces between adjacent ones of the second warps and sides of the first warps are above sides of adjacent ones of the second warps, and the first and second warps being side by side in a stretched state (Figure 11) of the head receiving part in which the headgear is deformed by the user's head. It is noted that it is inherent of elastic yarns to become flat when stretched and when unstretched to create gathered portions for giving an article adjustable fit capabilities.

As for claim 2, the head receiving part is a crown including a plurality of panels 12-17 made of the multiple fabric and are connected to one another to form the crown (Figure 2).

As for claim 3, the head receiving part is a headband peripherally receiving the head of the wearer. It is noted by the Examiner that the applicant has not provided any detail on the claimed headband. The head receiving part of the headwear encircles the user's head when worn and forms a band type structure around the head.

However, Cho is missing a configuration which specifically shows the warp and weft yarns of the fabric.

As for claim 1, Adamson shows a fabric 10 having warp 14 and weft 15, 16 yarns. Figures 2-4 show a multiple fabric comprising first and second warps alternately arranged to be adjacent to each other. The first and second warps being arranged in

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vertically separated layers in an unstretched state. The first warps overlap the second warps in the unstretched state so that centers of the first warps are above spaces between adjacent ones of the second warps and the first and second warps being side by side in a stretched state. As noted above, it is inherent of elastic yarns to become flat when stretched and when unstretched to create gathered portions for giving an article adjustable fit capabilities.

As for claim 5, the multiple fabric further includes wefts 15, 16, which pass by the first and second warps in a zigzag pattern to form loops (Figures 2-5).

As for claim 6, the wefts 16 are stretchable yarns. The wefts 16 are elastic and are therefore stretchable (Column 3, 17).

As for claim 7, wherein the first warps and the second warps have at least one common property. It is noted the applicant has not clarified what the common property is. The Examiner has chosen the fabric in which the warps are made of to be the common property (Column 4, 28-37).

As for claim 8, wherein the second warps have a peculiar property which the first warps are lacking. It is noted that the applicant has not clarified what the peculiar property is. The first warps and second warps have different locations within the fabric, which is considered a peculiar property as best understood by the Examiner.

As for claim 21, wherein all of the first warps are below the wefts and all of the second warps are above the wefts (Figures 2-5).

When combined with the teachings of Cho, the result would be headwear with adjustable fit capabilities with the claimed yarn configuration. MPEP 2144.04 also

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states that adjustability is not a patentable advance (In re Stevens , 212 F.2d 197, 101 USPQ 284 (CCPA 1954)). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the yarn configuration of Adamson to modify the sweatband of Cho in order to provide headwear that can adjust to fit a variety of users.

Claims 9-11 and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cho and Adamson as applied to claim 1 above, and further in view of Yan (U.S. 6,131,202). Cho and Adamson disclose the invention substantially as applied in claim 1 above. However, they are missing a sweatband including a stretchable fabric and a band core comprising a foam layer and an elastic band layer, wherein the band core and stretchable fabric are stitched along the lower edge with stretchable yarn. They are also missing shape tape that is stitched along the lower end of the headwear to help maintain its shape.

As for claims 9, 10, 11, 13-18, Yan shows a stretchable fabric cap 2 made from cotton and spandex having a sweatband attached to the lower edge of a head receiving part of the headwear.

As for claim 9, the sweatband includes an elastic band. The sweatband includes an outer covering made of a stretchable fabric. The stretchable fabric is in band form and is considered to be an elastic band.

As for claim 10, the sweatband 24 includes a band core (Figure 5), which has a foam elastomeric band allowing alleviation of pressure for the wearer.

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As for claim 11, the stretchable fabric is made of the multiple fabric. It is noted that the stretchable fabric of Yan can be made of cotton woven with a synthetic fiber in both the warp and weft directions (Column 1, 59-64). Therefore the fabric is considered to be a multiple fabric as best understood by the Examiner.

As for claim 13, the band core is comprised of a synthetic foam material (Figure 5). It is well known for synthetic foam to be a resin form.

As for claims 14 and 15, the band core is adhered to the lower periphery of the headwear by a stretchable thread forming an elastic band around the headwear. The band core also comprises a synthetic foam material. It is well known in the art to use a polyurethane foam to offer a level of comfort to the user.

As for claim 16, the band core and the stretchable fabric are stitched with an elastic thread (Column 3, 23-30 and Column 4, 31-34).

As for claim 17, wherein the lower ends of the sweatband and the head receiving part are wholly pressed and stitched together, along the lower edge thereof (Column 3, 23-30).

As for claim 18, wherein the lower ends of the sweatband and the head receiving part are stitched with a stretchable yarn (Figure 4)(Column 3, 23-30).

As for claims 19-20, Yan also shows stitching along the lower end of the headwear. The applicant claims that the claimed shape tape is stitching along the lower end of the head receiving part. Yan therefore shows shape tape which is used to hold all layers of the headwear together which maintains the shape of the headwear.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Yan to modify Cho and Adamson in order to provide a sweatband that offers the wearer more comfort and elasticity while allowing the headwear to be adapted to various head sizes without an additional size adjustable mechanism.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cho and Adamson and further in view of Lee (U.S. 6,347,410). Cho and Adamson disclose the invention substantially as applied in claim 1 above. However, they are missing yarns that are uniaxially stretchable. Lee shows a self-sizing baseball cap 10 wherein the sweatband segment is uniaxially stretchable (Column 4, 7-8 and 11-12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Lee to modify Cho and Adamson in order to provide a cap that is able to stretch uniaxially providing additional comfort and use to more wearers.

Response to Arguments

Applicant's arguments with respect to claims 1-3 and 5-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Slough (U.S. 2,749,947), Hendley (U.S. 2,379,580), Stein (U.S. 2,144,667), and Seltzer (U.S. 2,995,154) show fabrics having layered structures with warp and weft yarns.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALISSA J. TOMPKINS whose telephone number is (571)272-3425. The examiner can normally be reached on M-F 830-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Alissa J. Tompkins/
Examiner, Art Unit 3765